

Abstract of the Disclosure

An access point (11) for a wireless local area network (10) transmits a beacon message during a service interval period (21). This beacon message identifies, in a preferred embodiment, those subscriber units to whom the access point will shortly be transmitting data. Subscriber units that are not identified in the beacon message and that do not have data themselves to transmit to the access point can implement a power conservation mode of operation until the next beacon message. Subscriber units that have data, such as voice information, to transmit can utilize the beacon message contents to at least estimate a likely time by when the access point will have concluded making its transmissions to the subscriber units. That estimated time can then be used to facilitate scheduling a time at which a given subscriber unit will contend for an opportunity to transmit its data to the access point. In a preferred embodiment, this scheduled transmission time can potentially occur either during a contention window that follows the service interval period or during a dynamic contention window that follows the transmissions of the access point and concludes with the conclusion of the service interval period. Subscriber units can then use intervening periods of time to effect their power conservation schemes of choice.